

Application No. 10/602,025  
Amendment under 37 CFR 1.111  
Reply to Office Action dated March 26, 2007  
July 26, 2007

REMARKS

By this amendment, claims 1 and 3 have been amended and new claims 5-7 have been added to this application. Currently, claims 1, 3 and 5-7 are pending in the application.

Claims 1 and 3 were rejected under 35 USC 102(b) as being anticipated by Brimhall et al. (U.S. Patent No. 5,772,636).

This rejection is respectfully traversed in view of the amendments to the claims and the following remarks.

The present invention relates to an indwelling catheter set for transfusion, which can be applied for dialysis treatment, fluid infusion, blood infusion and such. More particularly, the present invention relates to an indwelling catheter set which effectively prevents blood leakage in every step of the transfusion. For example, it prevents blood leakage when inserting the indwelling catheter set to the body of the patient and connecting a blood infusion circuit to the syringe. Also, the present invention assures safety after drawing out a needle from the body of the patient (see page 1, lines 6-14 of the specification).

The indwelling catheter set is used with an infusion system having an opposite connector (see page 2, lines 5-7 of the

Application No. 10/602,025  
Amendment under 37 CFR 1.111  
Reply to Office Action dated March 26, 2007  
July 26, 2007

specification).

As shown in Fig. 1, an indwelling catheter set 1 comprises a catheter 3; a cover 7 fixed to a proximal end of the catheter 3; a connector 9 having a hemostatic valve 10 housed in the connector 9, the connector 9 being fixed to the cover 7 (see Fig. 4); an adapter 11 detachably connected to one end of the connector 9 (see page 7, line 22 - page 8, line 1 of the specification); a hollow needle 13 slidably fitted to an inside of the catheter 3 (see Fig. 4); a needle cover 15 fixed to a proximal end of the hollow needle 13, the needle cover 15 being configured so as to be connected with the adapter 11 (see Fig. 4); and a telescopic pipe 17, 21 comprising a safety cover 19, the telescopic pipe 17, 21 being housed in the needle cover 15 so as to be extensible wherein the safety cover 19 covers a distal end of the hollow needle 13 when the telescopic pipe 17, 21 is fully extended.

After the inner needle 13 is drawn out, the hemostatic adapter 11 is uninstalled from the connector 9. When the connector of the auxiliary apparatus (not shown) is inserted and fixed to the connector 9, the hemostatic valve 10 assures air-tightness. Thereby the connector of the auxiliary apparatus can

Application No. 10/602,025  
Amendment under 37 CFR 1.111  
Reply to Office Action dated March 26, 2007  
July 26, 2007

be easily connected with the catheter 3 (see page 9, lines 11-17 of the specification). Thus, the one end of the connector is connectable with either of the adapter and the opposite connector.

Independent claim 1 has been amended to recite "An indwelling catheter set for use with an infusion system having an opposite connector", "an adapter detachably connected to one end of the connector", "a needle cover fixed to a proximal end of the hollow needle, the needle cover being configured so as to be connected with the adapter", and "wherein the one end of the connector is also connectable with the opposite connector when the adapter is detached so that a flow path for fluid can travel through the infusion system to the catheter is along and parallel with a longitudinal axis of the connector".

These features are not shown or suggested by Brimhall et al. Brimhall et al. relate to a "bloodless" catheter assembly that includes a needle shield assembly that will safely shield the sharp distal tip of the introducer needle after the needle has been used (see column 1, lines 5-8).

As shown in Fig. 2, Brimhall et al. disclose a catheter assembly with the interlocking telescopic needle shield assembly 10 comprising a catheter 22; a catheter assembly 20 including a

Application No. 10/602,025  
Amendment under 37 CFR 1.111  
Reply to Office Action dated March 26, 2007  
July 26, 2007

catheter hub 21 connected to the catheter 22; the catheter hub 21, the proximal end of which is sealed with an elastomeric plug 26; the catheter hub 21 being fixed to the catheter assembly 20; a needle 30 slidably fitted to an inside of the catheter assembly 20; and a shield housing 31 in which the proximal end of needle 30 is securely adhered.

Brimhall et al. indicate that an IV fluid supply line (not shown) is not connected to the proximal end of the catheter hub 21 but rather is connected to a luer lock adapter 25 (see column 4, lines 27-31 and Figs. 1 and 2) led out of the side of the catheter hub 21. Therefore, in Brimhall et al., fluid travels from the IV fluid supply line through an extension tube 24 to the catheter 22.

Applicant respectfully submits that Brimhall et al. do not disclose "an adapter detachably connected to one end of the connector" as recited in claim 1.

Applicant also respectfully submits that Brimhall et al. do not disclose "a needle cover fixed to a proximal end of the hollow needle, the needle cover being configured so as to be connected with the adapter" as recited in claim 1.

Further, applicant respectfully submits that Brimhall et al. do not disclose "wherein the one end of the connector is also

Application No. 10/602,025  
Amendment under 37 CFR 1.111  
Reply to Office Action dated March 26, 2007  
July 26, 2007

connectable with the opposite connector when the adapter is detached so that a flow path for fluid can travel through the infusion system to the catheter is along and parallel with a longitudinal axis of the connector" as recited in claim 1.

For these reasons, it is believed that Brimhall et al. do not teach or suggest the claimed features of the present invention. Therefore, it is respectfully requested that this rejection be withdrawn.

New dependent claims 5-7 have been added to the application and these features are also not shown by Brimhall et al.

New dependent claim 5 recites that the hemostatic valves are disposed in a coaxial and separated manner so as to guide the hollow needle. The basis for new claim 5 is described in lines 3-5, page 9 of the specification.

New dependent claim 6 recites that the hemostatic valve is so disposed in the connector that a portion of the opposite connector is capable to pass through the hemostatic valve when the opposite connector is detachably connected to the one end of the connector. The basis for new claim 6 is described in lines 11-17, page 9 of the specification.

New dependent claim 7 recites that the one end of the connector includes engaging means for making a connection with

Application No. 10/602,025  
Amendment under 37 CFR 1.111  
Reply to Office Action dated March 26, 2007  
July 26, 2007

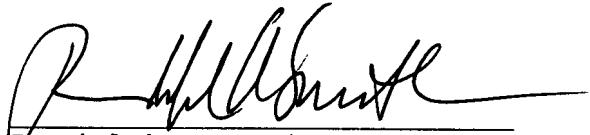
either of the adapter and the opposite connector. The basis for new claim 7 is described in lines 1-3, page 6 of the specification.

These features are not shown or suggested by the prior art of record. It is therefore respectfully submitted that new claims 5-7 are also allowable.

In view of foregoing claim amendments and remarks, it is respectfully submitted that the application is now in condition for allowance and an action to this effect is respectfully requested.

If there are any questions or concerns regarding the amendments or these remarks, the Examiner is requested to telephone the undersigned at the telephone number listed below.

Respectfully submitted,



Randolph A. Smith  
Reg. No. 32,548

Date: July 26, 2007

**SMITH PATENT OFFICE**  
1901 Pennsylvania Ave., N.W.  
Suite 901  
Washington, DC 20006-3433  
Telephone: 202/530-5900  
Facsimile: 202/530-5902  
Nakajima072607